Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended)   An information processing method comprising the steps of:

(a) obtaining, among arithmetic instructions, information on data sets referred to by memory reference, and

(b) respectively assigning to different memory banks a plurality of data sets based on the information, each data set being simultaneously referred to in the same execution cycle by memory reference to be performed in accordance with an arithmetic instruction.

2. (Currently Amended)   The method of Claim 1, further comprising the step of

(c) establishing bank assignment priority,

wherein in the step (b), the assignment to the memory banks is performed in sequence beginning with data sets that are high in the priority established in the step (c).

3. (Original)   The method of Claim 2, wherein in the step (c), the bank assignment priority is established according to a loop count that indicates the number of times the arithmetic instruction is executed repeatedly.

4. (Original)   The method of Claim 2, wherein in the step (c), the bank assignment priority is established according to data-use frequency.

5. (Cancelled)

6. (Currently Amended)   An information processing method comprising the steps of:

(a) reading an instruction that specifies data sets, each of which is referred to in the same execution cycle, to be assigned to different memory banks, respectively, and

(b) respectively assigning to the different memory banks the data sets that are specified to be assigned to the different memory banks by the instruction.

7. (Currently Amended)   The method of Claim 6, wherein in the step (b), the data sets that are specified to be assigned to the different memory banks are assigned preferentially first to the memory banks, then other data are assigned second to the memory banks.

8. (Currently Amended)   The method of Claim 7, further comprising the step of

(c) establishing bank assignment priority among the data sets that are specified to be assigned to the different memory banks,

wherein in the step (b), the assignment to the memory banks is performed in sequence beginning with data sets that are high in the bank assignment priority.

9. (Currently Amended)   An information processing method comprising the steps of:

(a) reading an instruction that specifies to which memory bank a data set each of data sets is assigned, each of the data sets being referred to in the same execution cycle and

(b) assigning the data sets [[set]] to the specified bank memory banks, respectively.

10. (Currently Amended)   The method of Claim 9, wherein in the step (b), the data sets are ~~set is~~ assigned first ~~preferentially~~ to the specified [[bank]] memory banks, respectively, and other data are assigned second to the memory banks.

11. (Currently Amended)   An information processor, comprising:

a first unit configured for obtaining ~~wherein~~ information on a plurality of data sets each of which is simultaneously referred to in the same execution cycle by memory reference performed in accordance with an arithmetic instruction; ~~is obtained,~~ and

a second unit configured for assigning the data sets ~~are assigned~~ to different memory banks, respectively.

12. (Currently Amended)   The processor of Claim 11, wherein the assignment to the memory banks by the second unit is performed in sequence beginning with data sets that are high in bank assignment priority.

13. (Original) The processor of Claim 12, wherein a loop count that indicates the number of times the arithmetic instruction is executed repeatedly is set as the bank assignment priority.

14. (Original) The processor of Claim 12, wherein data-use frequency is set as the bank assignment priority.

15. (Cancelled)

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16. (Currently Amended)   An information processor, <u>comprising:</u>

<u>a first unit configured for obtaining information of</u> ~~wherein~~ data sets<u>, each of which is</u>

<u>referred to in the same execution cycle;</u> ~~to be assigned to different banks are specifiable~~

<u>a second unit configured for specifying the data sets to be assigned to different memory</u>

<u>banks, respectively, based on the information.</u>

17. (Currently Amended)   The processor of Claim 16, wherein <u>the second unit assigns</u>

each of the data sets ~~that are~~ specified to be assigned to the different <u>memory</u> banks<u>, to a</u>

<u>corresponding memory bank, before assigning other data to the memory banks</u> ~~are assigned~~

~~preferentially to the banks~~.

18. (Currently Amended)   The processor of Claim 17, wherein bank assignment

priority is established among the data sets that are specified to be assigned to the different

<u>memory</u> banks, and the assignment to the <u>memory</u> banks is performed in sequence beginning

with data sets that are high in the bank assignment priority.

19. (Currently Amended)   An information processor, <u>comprising:</u>

<u>a first unit configured for obtaining information of data sets, each of which is referred to</u>

<u>in the same execution cycle; and</u>

<u>a second unit configured for specifying</u> ~~wherein a bank~~ <u>memory banks</u> to which ~~a data set~~

~~is~~ <u>the data sets are respectively</u> assigned<u>, based on the information</u> ~~is specifiable~~.

20. (Currently Amended) The processor of Claim 19, wherein <u>the second unit assigns</u> [[the]] <u>each</u> data set <u>whose corresponding memory bank has been specified by the second unit, is</u> <u>assigned to the corresponding memory bank before assigning to the memory banks other data</u> <u>sets whose corresponding memory banks are not specified</u> ~~is assigned preferentially to the~~ ~~specified bank~~.